

## CLAIMS

new claims:

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15. A method of compressing a sequence of data elements which are image data, comprising the steps of storing data elements in a compressed or uncompressed form depending on a correlation with the data elements preceding or following the data elements in a sequence; providing at least one additional data element in which is stored an information as to whether the stored data elements are stored in a compressed or uncompressed form; storing in a first region the data element in which is stored information as to which data elements are stored in a compressed or uncompressed form; and storing in a second storage region the compressed or uncompressed data elements.

16. A method as defined in claim 1; and further comprising processing the sequence of data elements in a predeterminable order, in which successive elements are checked as to whether they are identical.

17. A method as defined in claim 15; and further comprising occurring a compression of the data element in such a way that data element

which occur several times in succession are counted and are stored with a repetition factor.

18. A method as defined in claim 15; and further comprising storing the sequence, in the sequences of data element which exceed a predeterminable number of data elements, in a number of data packets wherein each data packet is comprised of at least two data elements.

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19. A method for decompressing a sequence of data elements which are image data, from a data packet, comprising the steps of comprising a data packet of data elements in a first region and a second region of the data packet; generating a sequence of data elements as a function of the data elements stored in the first region, from the data elements stored in the second region, with or without decompression; and processing the data elements and base elements in a predetermined sequence; respectively associating each base element of the data elements stored in the first region with two data elements stored in the second region; if a base element has a first value, not occurring a compression of the data element; if the base element has a second value not occurring a decompression.

20. A method as defined in claim 19; and further comprising, depending on the data elements present in the second region of the data packet and the first base element of a predetermined partial sequence to be processed according to a predetermined order which is an empty partial sequence, adding data elements; continuing generating the partial sequence for each additional base element to be processed as a function of the data element present in the second region of the data packet until a termination criterion is fulfilled.

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21. A method as defined in claim 20; and further comprising, for the case in which no decompression occurs, adding data element to the partial sequence unchanged.

22. A method as defined in claim 20; and further comprising occurring a decompression in such a way that a first, predetermined data element associated with the base element is established as a repetition factor for a second, predetermined data element associated with the base element; and adding the second data element to the partial sequence in accordance with a repetition factor.

23. A method as defined in claim 20; and further comprising executing a decompression on a data sequence comprised of a number of concatenated or successive data packets.

24. A method as defined in claim 20; and further comprising connecting a device to a calculating unit and a display device; depending on information transmitted by the calculating unit, decompressing at least partially compressed sequences of data element

25. A method as defined in claim 24; and further comprising transmitting the consequently generated image data to the display device.

26. A method as defined in claim 25, wherein said transmitting includes transmitting via an image memory.

27. A method as defined in claim 24; and further comprising operating the device for compressing part of a freely programmable combination instrument.

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